their feet (Adler & Pearson, 1982) and comparable sense organs in *M. stellatarum* would enable the moth to detect surface salt when settling. The observation that a proximity of salt solution will elicit flexing motions of the antennae in purple emperor butterflies *Apatura iris* L. (Martin C. White, *pers. comm.*), on the other hand, suggests that some species may be able to detect short-range gradients in the concentration of airborne salt molecules.—LEONARD WINOKUR, 8 Parklands Close, Chandlers Ford, Eastleigh, Hants SO53 2EQ.

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A new locality for *Cosmotettix caudatus* (Flor) (Hemiptera: Cicadellidae), with a note on its ecology—The known distribution of *C. caudatus* in Britain is very scattered, with single localities previously reported in Buckinghamshire, Lancashire, Northamptonshire, Oxfordshire and Somerset (Kirby, 1992). The ecology of the insect is poorly known. Previous British records are from wet areas and water margins. Le Quesne (1969) reports it from "grasses in damp places". Ossiannilsson (1983) gives *Carex vesicaria* L. as a foodplant, and its habitat as "tall sedge-bogs".

In 1990 I found *C. caudatus* at a second Northamptonshire locality, Racecourse Farm Fields SSSI, National Grid Reference TF018042. My first visit to this site was made on 10.vi.1990, close to dusk on a cold evening. Examination of a large (approximately two metres across) patch of *Carex hirta* L. revealed a considerable number of *Cicadula persimilis* (Edwards), many of them quite high in the vegetation and easily caught by sweeping. There were smaller numbers of a similarly sized but paler insect without obvious markings on the head. These occurred only low down in

the sedge clump. None were taken by sweeping and, because of the dense vegetation, they were elusive, even at the low temperature at the time of observation. My initial reaction was to dismiss them as teneral *Cicadula*, hypothesizing that their tendency to keep low in the vegetation might be an adaptation to keep them relatively safe from predation when their defences were weak and, perhaps, their jumping ability limited. I captured two individuals for checking, which proved on my return home to be a male and female *C. caudatus*.

My next visit to the site was on 20.vii.1990, when I hoped to establish more clearly the distribution of the insect and to capture nymphs. Though the weather was better than on the June visit and I now had an established search-image for the insect, *C. caudatus* seemed significantly less numerous than on the first occasion, and I was unable to find associated nymphs. Once again, the insects were concentrated low down in the vegetation. A third visit to the site on 12 September produced no *C. caudatus* despite careful search of its known area of distribution.

Two points which emerge from these observations are worthy of note. First, Racecourse Farm Fields is not a wetland, but an oolitic limestone grassland. Second, *C. caudatus* was found only on *Carex hirta* (of which only this one patch was found on the site). There was a large patch of *Carex flacca* Schreber adjacent to the *C. hirta* and contiguous with it for a length of about a metre. *Cicadula persimilis* occurred freely and seemingly indifferently in both sedge species, but no *C. caudatus* were found on this or on other patches of *C. flacca* in the vicinity, nor on three other *Carex* species present at the site: *C. ericetorum* Pollich, *C. spicata* Hudson and *C. caryophyllea* Latourr, all of which grew as scattered plants throughout the grassland.

It seems clear that *Carex hirta* is a foodplant of *C. caudatus*, and rather likely that, at Racecourse Farm Fields, it is the occurrence of the host plant rather than the habitat as such which is the limiting factor in determining the distribution of the insect. There is no reason to suppose that *C. hirta* is the only foodplant, but it does seem that the insect does not occur on all sedges. It is possible, also, that it requires its foodplants to occur in large dense clumps. If the habits of the insect at this site, in remaining very low in the vegetation, are typical, then it could easily be overlooked, especially if amongst similarly sized *Cicadula* species. This could go some way towards explaining the widely scattered records of the species.

The phenology of the insect observed in 1990 may be atypical. The very hot summer of that year profoundly affected limestone grasslands in the Peterborough area. By early July signs of drought were already apparent, and by September much of the vegetation was brown and dry, and finding insects of any sort was difficult.

My visits to Racecourse Farm Fields were made as part of a survey of oolitic limestone grasslands undertaken for the East Midlands Region of the Nature Conservancy Council (now English Nature). Thanks go to Burleigh Estates for giving permission for the survey, and to Sarah Lambert for identifying the sedges.—
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